Observations of Occultations of Stars by the Moon, and of Phenomena of Jupiter's Satellites, made at the Royal Observatory, Greenwich, in the year 1876.

(*Communicated by the Astronomer Royal.*)

Occultation of Stars by the Moon.

Day of Obs. 1876.	Phenomenon.		Telescope.*	Power.	Moon's Limb.	Mean Solar Time of Observation. h m s	Observer.
Feb. 2	Disapp.	of 27 Arietis	E. Eq.	140	Dark	6 30 19·3	L
April 7	,,	Piazzi XII. 111	,,	,,	,,	8 27 53·9	C
,,	,,	*f* Virginis	Altaz.	100	,,	11 38 21·7	C
11	Reapp.	*b* Scorpii	,,	,,	,,	11 56 51·2	C
May 5	Disapp.	50 Virginis	E. Eq.	140	,,	12 0 43·0	A D
Aug. 13	,,	χ' Tauri	Altaz.	100	Bright	12 19 20·5	G
Nov. 29	,,	47 Arietis	E. Eq.	140	Dark	7 57 28·4	T
,,	,,	47 Arietis	S.E. Eq.	220	,,	7 57 28·2	M

Phenomena of Jupiter's Satellites.

Day of Obs. 1875.	Satellite.	Phenomenon.	Telescope.	Power.	Mean Solar Time of Observation. h m s	Mean Solar Time from N.A. h m s	Observer.
Apr. 8	I (*a*)	Occ. reapp. first cont.	S.E. Eq.	130	13 18 28		
,,	I	,, bisection	,,	,,	13 20 52	13 18	M
,,	I	,, last cont.	,,	,,	13 26 59		
15	I	Ecl. disapp.	E. Eq.	140	12 11 56·3	12 12 1·5	R P
20	II (*b*)	Tr. eg. first cont.	,,	,,	11 28 58		
,,	II	,, last cont.	,,	,,	11 31 12	11 26	T
May 1	I (*c*)	Ecl. disapp.	,,	,,	10 28 11·4	10 28 2·3	A D
,,	I (*d*)	Occ. reap. first cont.	,,	,,	12 59 37		
,,	I	,, last cont.	,,	,,	13 1 41	13 0	A D
4	II	Tr. ing. bisection	,,	,,	13 29 36		
,,	II	,, last cont.	,,	,,	13 31 51	13 28	P
6	II (*e*)	Occ. reapp. first cont.	,,	310	10 0 19	10 3	C
9	I (*f*)	Tr. eg. last cont.	,,	140	11 53 10	11 51	A D
20	II	Occ. disapp. first cont.	,,	310	11 59 21		
,,	II	,, bisection	,,	,,	12 1 50	12 1	A D
,,	II	,, last cont.	,,	,,	12 3 20		

* The clear aperture of the object-glass of the S.E. Equatoreal is $12\frac{3}{4}$ inches, of the East Equatoreal 6·7 inches, of the North Equatoreal 4·1 inches, and of the Altazimuth $3\frac{3}{4}$ inches.

Day of Obs. 1875.	Satellite.	Phenomenon.	Telescope.	Power.	Mean Solar Time of Observation. h m s	Mean Solar Time from N.A. h m s	Observer.
May 29	II	Tr. eg. first cont.	,,	,,	11 45 53		
,,	II	,, bisection	,,	,,	11 47 22	11 49	C
,,	II	,, last cont.	,,	,,	11 49 7		
June 24	I (*g*)	Tr. eg. last cont.	,,	140	11 29 46	11 14	L
July 3	III	,, last cont.	,,	,,	11 9 12	11 10	T

Notes.

(*a*) The limb of *Jupiter* was very tremulous.

(*b*), (*d*), (*e*) The limbs of the planet were badly defined.

(*c*) The first diminution of brightness was observed $2^m\ 15^s$ before the time here recorded.

(*f*) The observation was not satisfactory.

(*g*) The image of *Jupiter* was very bad. The recorded time is evidently erroneous.

The initials L, C, AD, M, T, G, P, and RP, are those of Mr. Lynn, Mr. Criswick, Mr. Downing, Mr. Maunder, Mr. Thackeray, Mr. Graham, Mr. Pulley, and Mr. Pett respectively.

Royal Observatory, Greenwich,
1877, *January* 13.

Stars to be compared in R. A. with Mars 1877, *for Determination of the Parallax of Mars.*

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The stars in the accompanying list have been selected from those given on the chart in the *Monthly Notices* for 1875, November, as being suitable for equatoreal observations of the differences of their R. A. and that of *Mars*, east and west of the meridian. They have been arranged in pairs, one star preceding and the other following *Mars*; and as a fresh setting of the Equatoreal in N.P.D. will usually be required for each object, an interval of at least three minutes of time is allowed between the transit of *Mars* and that of either star. In some cases, however, a pair of stars can be found passing through the same field as *Mars*, and here a much smaller interval will be sufficient, with the advantage that a larger number of comparisons can be made, the sets being repeated in more rapid succession. Such pairs of stars are denoted by an asterisk. In order to eliminate as far as possible the effect of error of adjustment of the Equatoreal, stars have been selected at about equal distances north and south of *Mars*, and in some few instances where this was not practicable,